

IN THE UNITED STATES DISTRICT COURT
FOR THE NORTHERN DISTRICT OF ILLINOIS
EASTERN DIVISION

PRECI-DIP SA., a Swiss Corporation,

Plaintiff,

VS.

TRI-STAR ELECTRONICS
INTERNATIONAL, INC., a Delaware
Corporation,

Defendant.

§ §

Case No. 1:08-cv-4192

The Honorable Ronald A. Guzman

MOTION TO DISMISS OR, IN THE ALTERNATIVE, TRANSFER VENUE

Defendant Tri-Star Electronics International, Inc. (“Tri-Star”) hereby moves to dismiss plaintiff Preci-Dip SA’s (“Preci-Dip”) First Amended Complaint (Civil Docket No. 10) pursuant to Rule 12(b)(3) of the Federal Rules of Civil Procedure for improper venue because Preci-Dip's action contravenes the "first-to-file" rule.

I. PRELIMINARY STATEMENT

The facts and law of this motion are straightforward. Defendant Tri-Star has already filed a lawsuit in the Central District of California relating to precisely the same subject matter as this later-filed lawsuit. More specifically, Tri-Star filed a complaint for patent infringement against Preci-Dip on June 26, 2008. See Exhibit C hereto. Since Preci-Dip is a Swiss company which cannot be served in the typical fashion in the United States, Tri-Star requested in writing that Preci-Dip voluntarily accept service pursuant to The Hague Convention, Article 5, which states that a "document may always be served by delivery to an addressee who accepts it voluntarily." See Exhibit D attached hereto. Preci-Dip received that written request via certified

mail on July 7, 2008. See Exhibit E attached hereto. When Preci-Dip did not accept service within the 14-day window set forth in Tri-Star's request, Tri-Star began the formal service requirements pursuant to The Hague Convention, which requires that the documents be translated and that they then be delivered to a Swiss government agency for service of process. See Declaration of Spencer Persson ("Persson Decl."), ¶ 5, attached as Exhibit A hereto.

Instead of voluntarily accepting service and dealing with the California lawsuit in an efficient manner, Preci-Dip filed this lawsuit in the Northern District of Illinois, seeking a declaration that it has not infringed Tri-Star's patents. Preci-Dip's lawsuit in this district was filed on July 23, 2008 (Docket No. 1), with a First Amended Complaint ("FAC") filed on July 28, 2008. Only the FAC was served. Both documents acknowledge that Tri-Star's California action was filed first.

It is indisputable that Tri-Star's principal place of business is California, all of its U.S. witnesses are located in California, the documents relating to the lawsuit are in California, and Preci-Dip is a Swiss company with no specific ties to any state, including Illinois. This Illinois lawsuit violates the first-to-file rule and is inefficient. Preci-Dip's obvious attempt to wrest control of the forum from Tri-Star (the natural plaintiff) is nothing more than gamesmanship and impermissible forum shopping. Preci-Dip's conduct should not be countenanced and this Court should dismiss this action or transfer it to California to be combined with the matter already on file.

II. BRIEF STATEMENT OF FACTS

A. The Infringement

Tri-Star owns United States Patent No. 6,250,974 (the "974 Patent"). See Declaration of David J. Bouzek ("Bouzek Decl."), ¶ 3, attached as Exhibit B hereto. Preci-Dip -- a Swiss

company which also happens to be one of Tri-Star's competitors -- has purposefully placed infringing products into the stream of commerce in California. See Bouzek Decl., ¶ 4 (Exh. B). More specifically, Preci-Dip has infringed on Tri-Star's 974 Patent by, *inter alia*, making, using, selling, importing, and/or offering for sale, certain electrical sockets, which includes Preci-Dip's products designated as MIL-C-39029. Id. Despite repeated requests, Preci-Dip has refused to cease its infringing activities. See Exhibits F through K attached hereto.

B. The Parties

Tri-Star is a Delaware corporation with its headquarters and principal place of business in California. See Bouzek Decl., ¶ 1 (Exh. B). Tri-Star's officers live in California, it maintains its corporate records in California, and the individuals who are knowledgeable regarding Preci-Dip's infringement are located in California. See Bouzek Decl., ¶ 2 (Exh. B). In fact, each communication to Preci-Dip from Tri-Star relating to this dispute came from California, and Preci-Dip's return communications were all directed back to Tri-Star in California.

Preci-Dip is a Swiss company with no headquarters in the United States, no principal place of business in the United States, no agent for service of process in the United States, and presumably has none of its corporate records in the United States. See Persson Decl., ¶ 3 (Exh. A).

C. Tri-Star's Attempts to Resolve This Dispute Informally

On January 20, 2006, Tri-Star contacted Preci-Dip in writing to complain of Preci-Dip's infringing activity. See Exhibit F attached hereto. In that letter, Tri-Star informed Preci-Dip that it had become aware of Preci-Dip's products with "reversed clip technology," it had reviewed a number of Preci-Dip's patent filings, and it had reached the conclusion that Preci-Dip's products infringed the 974 Patent. Id.

On February 8, 2006, Pierre Lehmann, the Chief Executive Officer of Preci-Dip, responded to Tri-Star's letter with a request for additional information, purportedly so that Preci-Dip could investigate Tri-Star's concerns.¹ See Exhibit G attached hereto.

Within one week (on February 15, 2006) Tri-Star provided Mr. Lehmann with the requested information, including Tri-Star's patent number, the date that the 974 Patent was granted, the Australian patent number, and information relating to various patent applications that were pending throughout Europe. See Exhibit H attached hereto. No response was received.

In light of Preci-Dip's failure to respond, Tri-Star sent another letter to Mr. Lehmann on April 12, 2006. See Exhibit I attached hereto. Shortly thereafter, on April 26, 2006, Mr. Lehmann informed Tri-Star that Preci-Dip had investigated the matter and had reached the conclusion that its products did not infringe Tri-Star's existing or pending patents. See Exhibit J attached hereto.

On November 14, 2007, Tri-Star contacted Preci-Dip to complain about its continued infringement and informed Preci-Dip that it had inspected Preci-Dip's products, and had concluded that Preci-Dip's internal design elements definitely conflicted with Tri-Star's patent. See Exhibit K attached hereto. Tri-Star requested a prompt response from Preci-Dip so that the parties could reach an amicable resolution. Id. Tri-Star never received a response from Preci-Dip. See Bouzek Decl., ¶ 5 (Exh. B).

D. The California Action and Service Attempts

On June 26, 2008, Tri-Star filed a complaint in the United States District Court for the Central District of California against Preci-Dip for patent infringement. See Exhibit C attached hereto. On June 27, 2008 -- the very next day -- Tri-Star's counsel sent a letter, the complaint,

¹ Notably, Mr. Lehmann is also located in Switzerland. See Exhibit G attached hereto.

and related documents to Preci-Dip requesting that Preci-Dip voluntarily accept service pursuant to The Hague Convention, Article 5, which states that a "document may always be served by delivery to an addressee who accepts it voluntarily." See Persson Decl., ¶ 3 (Exh. A); Exhibit D. Since Preci-Dip is a Swiss company, it must be served in Switzerland under the formal procedures of The Hague Convention unless it voluntarily agrees to accept service under Article 5. Id.

In its written communication, Tri-Star requested that Preci-Dip sign and return the enclosed Acknowledgement of Service within 14 days of Preci-Dip's receipt of the complaint and related documents. Id. Tri-Star informed Preci-Dip that if it did not receive the Acknowledgement of Service within the prescribed time, it would take the necessary steps to effectuate service through other means permitted by The Hague Convention. Id. On July 7, 2008, Preci-Dip received the complaint and related documents by certified mail. See Persson Decl., ¶ 4 (Exh. A); Exhibit E. On July 22, 2008 -- when the 14 days had expired and Preci-Dip had failed to voluntarily accept service -- Tri-Star initiated the formal process of effectuating service under The Hague Convention. See Persson Decl., ¶ 5 (Exh. A).

E. Preci-Dip's Illinois Complaint

On July 23, 2008, Preci-Dip filed, but did not serve, its complaint in this action against Tri-Star. On July 28, 2008, Preci-Dip filed and served the First Amended Complaint. Both complaints acknowledged that Tri-Star had already filed a civil action in the Central District of California. See Complaint, ¶ 19; FAC, ¶ 17. Preci-Dip's complaint is essentially a declaratory relief action in which it requests a declaration from the Court that it has not infringed on Tri-Star's patent. It also seeks other ancillary relief, all stemming from either the patent infringement issues or the California lawsuit.

III. PRECI-DIP'S COMPLAINT SHOULD BE DISMISSED PURSUANT TO RULE 12(B)(3) OF THE FEDERAL RULES OF CIVIL PROCEDURE FOR IMPROPER VENUE BECAUSE TRI-STAR WAS THE FIRST TO FILE

Pursuant to Rule 12(b)(3) of the Federal Rules of Civil Procedure, this action should be dismissed for improper venue because Preci-Dip's action contravenes the "first-to-file" rule. The "first-to-file" rule is a well-established doctrine that encourages comity among federal courts of equal rank. Certified Restoration Dry Cleaning Network, LLC v. Tenke Corp., 511 F.3d 535, 551 (6th Cir. 2007). "The rule provides that when actions involving nearly identical parties and issues have been filed in two different district courts, the court in which the first suit was filed should generally proceed to judgment." Id. (internal citations and quotations omitted); see also Genentech, Inc. v. Eli Lilly & Co., 998 F.2d 931, 937-38 (Fed. Cir. 1993). "Comity works most efficiently where previously filed litigation is brought promptly to the attention of the district court, and the court defers." Church of Scientology of California v. U.S. Dept. of the Army, 611 F.2d 738, 750 (9th Cir. 1979). "The doctrine is designed to avoid placing an unnecessary burden on the federal judiciary, and to avoid the embarrassment of conflicting judgments." Id.

While the first-to-file rule "is not a rigid or inflexible rule to be mechanically applied, only in rare or extraordinary circumstances should the first-filed action give way to one filed later." Chase Manhattan Bank, USA, NA v. Freedom Card, Inc., 265 F. Supp. 2d 445, 448 (D.C. Del. 2003). Typically, the first-to-file rule governs unless there is some evidence of inequitable conduct, bad faith, or forum shopping. Illinois Blower, Inc. v. Deltak, LLC, 2004 U.S. Dist. LEXIS 5838, *8 (N.D. Ill. 2004). For example, courts disfavor a first-filed suit if that suit is an improper anticipatory filing seeking declaratory relief or is aimed solely at wresting the choice of forum from the natural plaintiff. Illinois Blower, supra at *8. "Whenever a litigant, whether a

swift first or a prompt retaliator, selects a forum with slight connections to the facts of his case, it is vulnerable to a charge of forum shopping." Formflex Foundations, Inc. v. Cupid Foundations, Inc., 383 F. Supp. 497, 499 (S.D.N.Y. 1974).

The first-to-file rule does not require the first-filed plaintiff to also be the first to serve, especially where the defendant in the first-filed action has notice of the first action prior to the filing of the second action. Fat Possum Records, Ltd. v. Capricorn Records, Inc., 909 F. Supp. 442, 446 (N.D. Miss. 1995); Illinois Blower, supra at *7; Pacesetter Sys., Inc. v. Medtronic, Inc., 678 F.2d 93, 95 (9th Cir. 1982).

Here, Tri-Star was unquestionably the first to file on June 26, 2008. Tri-Star filed in the Central District of California because its base of operations is there, as are the majority of its employees and documents relevant to the infringement action. Preci-Dip did not file its complaint until approximately one month after Tri-Star had filed in the Central District of California, and did so after having actual notice of the California action. Tri-Star gave Preci-Dip until July 21, 2008 to voluntarily accept service under The Hague Convention, Article 5. Rather than do so, Preci-Dip filed a competing action for declaratory relief in the Northern District of Illinois on July 23, 2008, filed the FAC on July 28, 2008, and served Tri-Star on or about July 28, 2008. Both actions involve the same issue: whether Preci-Dip's products infringe on the 974 Patent.

As set forth above, the FAC should be dismissed under Rule 12(b)(3) for improper venue because Tri-Star was the first to file, the two lawsuits are nearly identical, and Preci-Dip showed that it was merely retaliating when it filed this suit instead of accepting service of Tri-Star's California complaint. No rare or extraordinary circumstances exist that would require the Central District of California action to give way to this action. In fact, Preci-Dip's FAC is a

transparent retaliatory action "aimed solely at wresting the choice of forum from the natural plaintiff."²

Any argument that Preci-Dip's action should be given priority because it was first-served is contrary to the law. First, the rule is first to file, not first to serve. Second, Preci-Dip had notice of the California suit when Tri-Star provided Preci-Dip with the Complaint on June 27, 2008 (received on July 7, 2008) in hopes that Preci-Dip would voluntarily accept service and save the parties time and money. Preci-Dip admits that it had notice of Tri-Star's suit in the FAC. See FAC, ¶ 17.

IV. AT THE VERY LEAST, VENUE SHOULD BE TRANSFERRED TO THE CENTRAL DISTRICT OF CALIFORNIA

In the alternative, this Court should transfer this action to the Central District of California for the convenience of the parties. See 28 U.S.C. § 1404(a). Section 1404(a) permits district courts to transfer any civil action for the convenience of the parties and the witnesses or in the interests of justice, to any other district where the action might have been brought. Saint-Gobain Calmar, Inc. v. Nat'l Prods. Corp., 230 F. Supp. 2d 655, 658 (E.D. Pa. 2002) (applying 28 U.S.C. § 1404(a) to a patent infringement complaint). The purpose of allowing transfers under 28 U.S.C. § 1404(a) is to "prevent the waste of time, energy and money and to protect litigants, witnesses and the public against unnecessary inconvenience and expense." Id. (citations and internal quotations omitted).

"Transfer under section 1404(a) is appropriate if (1) venue is proper in both the transferor and transferee court; (2) transfer is for the convenience of parties and witnesses; and (3) transfer

² Indeed, had Preci-Dip filed first, its lawsuit would still be considered a retaliatory declaratory action which would constitute an exception to the first-to-file rule and would allow the Court to dismiss the FAC and facilitate proceeding with Tri-Star's action in the Central District of California. Illinois Blower, supra at *8; Formflex, 383 supra at 499.

is in the interest of justice.” Illinois Blower, supra at *9; Guthy-Renker Fitness, L.L.C. v. Icon Health & Fitness, Inc., 179 F.R.D. 264, 268 (C.D. Cal. 1998) (citing Arley v. United Pac. Ins. Co., 379 F.2d 183, 185 (9th Cir. 1967)); E. & J. Gallo Winery v. F. & P. S.P.A., 899 F. Supp. 465, 466 (E.D. Cal. 1994)).

Here, venue favors proceeding in the Central District of California. Tri-Star's documents and witnesses are located in California where Tri-Star's business is located, and therefore California is the most convenient venue for Tri-Star. Preci-Dip is located in Switzerland, and therefore venue is equally convenient for Preci-Dip in both California and Illinois.

The convenience of the parties and witnesses also favors proceeding in the Central District of California. “Courts consider four factors in determining whether transfer is convenient for the parties and witnesses: (1) the plaintiff's choice of forum; (2) the site of material events; (3) the availability of evidence in each forum; and (4) the convenience of the parties litigating in their respective forums.” Illinois Blower, supra at *10. First, while Preci-Dip's choice of forum was Illinois, Tri-Star is the natural plaintiff because it is alleging that Preci-Dip infringes on the 974 Patent. Illinois Blower, supra at *8. Preci-Dip's action is for declaratory relief based entirely on Tri-Star's allegations. Moreover, Tri-Star was the first to file. Therefore, Tri-Star is the plaintiff that matters, and its choice of forum -- the Central District of California -- should govern. The second factor is neutral because any infringement of the 974 Patent would apply equally in both jurisdictions. The availability of evidence clearly favors proceeding in the Central District of California, because all of the evidence and witnesses that will be presented by Tri-Star are located in California. Preci-Dip's evidence is presumably in Switzerland, and therefore both California and Illinois are equally convenient. Similarly, it is more convenient for Tri-Star to litigate in its home state of California; Preci-Dip has no

significant ties to any state in the United States.³ On the whole, three of the convenience factors favor California, and none favors litigating in Illinois.

The analysis of whether transfer is in the interests of justice generally involves considerations of judicial economy and relative ease and access to proof. Guthy-Renker, 179 F.R.D. at 269 (citing E. & J. Gallo Winery, 899 F. Supp. at 466). In analyzing judicial economy, all seven of Preci-Dip's claims can be just as easily litigated in California. The federal and common law claims are all available in California. With respect to the Illinois state law claims, (1) the Central District of California is entitled to hear Illinois state law claims; and, (2) the Illinois causes of action alleging deceptive trade practices and consumer fraud are also available in California. Compare 815 ILCS 510/1 *et seq.* & 815 ILCS 505/2 with Cal. Civ. Code § 1770 *et seq.* & Cal. Bus. & Prof. Code § 17200 *et seq.* The Central District of California has greater access to proof given Tri-Star's location in California.

If this Court does not dismiss the FAC, transfer is appropriate because the Central District of California (1) is the most convenient venue for the parties; (2) is the most convenient for the witnesses and for culling the evidence; and, (3) serves the interests of justice.

V. CONCLUSION

Based on the foregoing facts and well-established authority, Tri-Star requests that this Court dismiss this action in its entirety. If the Court determines not to do so, then Tri-Star requests that the matter be transferred to the Central District of California to be combined with Tri-Star's existing action in that venue.

³ In a conversation between Tri-Star's Illinois counsel and Preci-Dip's counsel, Preci-Dip's counsel asserted that jurisdiction was proper in Illinois because both parties had a common customer located there, The Boeing Company. While Boeing is a Tri-Star customer, Tri-Star conducts business with The Boeing Company in Seattle, WA. See Bouzek Decl., ¶ 6 (Exh. B). Moreover, the fact that Preci-Dip might conduct business with a single customer in Illinois does not change the fact that the convenience factors to consider when determining whether a transfer is appropriate under section 1404(a) weigh heavily in favor of transferring the matter to the Central District of California.

Dated: August 15, 2008

Respectfully submitted,

/s/ John L. Abramic

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Attorneys for Defendant
TRI-STAR ELECTRONICS
INTERNATIONAL, INC.

CERTIFICATE OF SERVICE

The undersigned hereby certifies that a copy of the foregoing MOTION TO DISMISS OR, IN THE ALTERNATIVE, TRANSFER VENUE has been served upon the individuals listed below via the CM/ECF electronic filing system and via Federal Express on August 15, 2008.

Robert E. Browne
William J. Lenz
Maurice E. Finnegan, III
Neal, Gerber & Eisenberg LLP
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Chicago, Illinois 60602

August 15, 2008

/s/ John L. Abramic

EXHIBIT # A

accepts it voluntarily." See Exhibit "D." I asked Preci-Dip to voluntarily accept service because Preci-Dip is a Swiss company with no headquarters in the United States, no principal place of business in the United States, and no agent for service of process in the United States. As such, Preci-Dip must be served in Switzerland unless it voluntarily agrees to accept service. Therefore, in an attempt to save the parties time and money, I requested that Preci-Dip sign and return an enclosed Acknowledgement of Service within 14 days of Preci-Dip's receipt of the complaint and related documents. I informed Preci-Dip that if I did not receive the Acknowledgement of Service within the prescribed time, Tri-Star would take the necessary steps to effectuate service through other means permitted by The Hague Convention.

4. On July 7, 2008, Preci-Dip received the complaint and related documents by certified mail. See Exhibit "E."

5. Preci-Dip did not voluntarily accept service within the 14-day window set forth in my June 27 letter. Therefore, on July 22, 2008, I initiated the formal process of effectuating service under The Hague Convention.

6. This declaration in no way waives any privileged communications or work product.

I declare under penalty of perjury under the laws of the State of California that the foregoing is true and correct. Executed this 14th day of August, 2008, at Los Angeles, California.



SPENCER PERSSON

EXHIBIT # B

IN THE UNITED STATES DISTRICT COURT
FOR THE NORTHERN DISTRICT OF ILLINOIS
EASTERN DIVISION

PRECI-DIP S.A., a Swiss Corporation,

Plaintiff,

VS.

**TRI-STAR ELECTRONICS
INTERNATIONAL, INC., a Delaware
Corporation,**

Defendant.

www.pearsoned.com

Case No. 1:08-cv-4192

The Honorable Ronald A. Guzman

**DECLARATION OF DAVID J. BOUZEK IN SUPPORT OF MOTION TO DISMISS OR,
IN THE ALTERNATIVE, TRANSFER VENUE**

I, DAVID J. BOUZEK, declare as follows:

1. I am Vice President and Business Unit Manager of defendant Tri-Star Electronics International, Inc. ("Tri-Star"), a Delaware corporation with its headquarters and principal place of business in California. I make this affidavit in support of Tri-Star's Motion to Dismiss or, in the Alternative, Transfer Venue. I have personal knowledge of the following, and can and do competently testify thereto.

2. As stated in paragraph one, Tri-Star's headquarters and principal place of business is in California. Tri-Star's officers live in California, it maintains its corporate records in California, and the individuals who are knowledgeable regarding Preci-Dip SA's ("Preci-Dip") infringement are located in California.


3. Tri-Star owns United States Patent No. 6,250,974 (the "974 Patent").

4. On information and belief, Preci-Dip is a Swiss company. Preci-Dip is a competitor of Tri-Star, and within the past two and a half years Tri-Star discovered that Preci-Dip has been purposefully placing products that infringe on the 974 Patent into the stream of commerce. Specifically, Preci-Dip has infringed on the 974 Patent by, *inter alia*, making, using, selling, importing, and/or offering for sale, certain electrical sockets, which includes Preci-Dip's products designated as MIL-C-39029.

5. Beginning on January 20, 2006, Tri-Star has repeatedly written to Preci-Dip to complain of Preci-Dip's infringing activity. Preci-Dip initially requested additional information, purportedly to investigate Tri-Star's concerns. Following an exchange of correspondence, on April 26, 2006, Preci-Dip informed Tri-Star that it had investigated the matter and had reached the conclusion that its products did not infringe Tri-Star's existing or pending patents. On November 14, 2007, Tri-Star informed Preci-Dip that it had inspected Preci-Dip's products, and had concluded that -- contrary to the assertions in Preci-Dip's April 26, 2006 letter -- Preci-Dip's internal design elements definitely conflicted with Tri-Star's patent. Tri-Star never received a response to its November 14, 2007 letter. See Exhibits "F"-"K."

6. Tri-Star conducts business with The Boeing Company in Seattle, WA.

I declare under penalty of perjury under the laws of the State of California that the foregoing is true and correct. Executed this 14 day of August, 2008, at Los Angeles, California.



DAVID J. BOUZEK

EXHIBIT # C

COPY

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**TRI-STAR ELECTRONICS
INTERNATIONAL, INC.**

IN THE UNITED STATES DISTRICT COURT
FOR THE CENTRAL DISTRICT OF CALIFORNIA

**TRI-STAR ELECTRONICS
INTERNATIONAL, INC.,** a Delaware
corporation,

Plaintiff,

v.

PRECI-DIP DURTAL SA, a Swiss
corporation,

Defendant.

CV08-04226 GAF AJWx

Civil Action No.

**COMPLAINT FOR PATENT
INFRINGEMENT**

DEMAND FOR JURY TRIAL

2008 JUN 26 AM 10:59
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LOS ANGELES

FILED

1 Plaintiff Tri-Star Electronics International, Inc., formerly known as TSEI
2 Delaware Two, Inc. ("Tri-Star"), by its attorneys and for its complaint against
3 Defendant Preci-Dip Durtal SA ("Preci-Dip"), alleges as follows:

4 **NATURE OF THE ACTION**

5 1. This is a patent infringement action to stop Preci-Dip from
6 infringement of United States Patent No. 6,250,974 (the "'974 Patent"), entitled
7 HOODLESS ELECTRICAL SOCKET CONTACT, by inter alia, making, using,
8 selling, importing, and/or offering for sale including but not limited to electrical
9 socket contacts, which includes but is not limited to the product designated as MIL-
10 C-39029 ("Preci-Dip Socket Contact Products"). The '974 patent was duly and
11 legally issued on June 26, 2001, after full and fair examination by the United States
12 Patent and Trademark Office. A true and correct copy of the '974 Patent is
13 attached hereto as Exhibit A. The '974 Patent has been duly and legally assigned to
14 Tri-Star, which is now (and at all relevant times has been) the owner and possessor
15 of all rights pertaining to the '974 Patent.

16 **PARTIES**

17 2. Plaintiff Tri-Star is a corporation duly organized and existing under the
18 laws of the State of Delaware and is the successor by merger to Tri-Star Electronics
19 International, Inc., a California corporation.

20 3. Upon information and belief, Defendant Preci-Dip is a Swiss
21 corporation having its headquarters and principal place of business at Rue Saint-
22 Maurice 34, P.O. Box 834, CH-2800 Delémont, Switzerland. Preci-Dip conducts
23 business on a regular basis in the State of California.

24 **JURISDICTION AND VENUE**

25 4. This Court has subject matter jurisdiction over this action pursuant to
26 28 U.S.C. §§ 1331 and 1338(a) because it arises under the patent laws of the United
27 States, including 35 U.S.C. §§ 271 et seq.

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DEMAND FOR JURY TRIAL

Pursuant to Federal Rule of Civil Procedure, Rule 38, Tri-Star demands a trial by jury.

Dated: June 26, 2008

GREGORY B. WOOD
TODD M. SORRELL
SPENCER PERSSON
FULBRIGHT & JAWORSKI L.L.P.

By

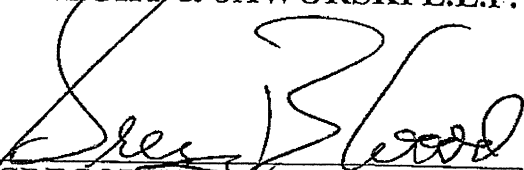

GREGORY B. WOOD
Attorneys for Plaintiff
TRI-STAR ELECTRONICS
INTERNATIONAL

EXHIBIT A



US006250974B1

(12) **United States Patent**
Kerek

(10) Patent No.: **US 6,250,974 B1**
(45) Date of Patent: **Jun. 26, 2001**

(54) **HOODLESS ELECTRICAL SOCKET CONTACT**

(75) Inventor: **Leslie Laszlo Kerek, Los Angeles, CA (US)**

(73) Assignee: **Tri-Star Electronics International, Inc., El Segundo, CA (US)**

(*) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 0 days.

(21) Appl. No.: **09/395,515**

(22) Filed: **Sep. 14, 1999**

Related U.S. Application Data

(63) Continuation-in-part of application No. 09/104,733, filed on Jun. 25, 1998, now abandoned,

(51) Int. Cl.⁷ **H01R 13/187**

(52) U.S. Cl. **439/843**

(58) Field of Search **439/843, 851, 439/856, 845**

(56) **References Cited**

U.S. PATENT DOCUMENTS

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* cited by examiner

Primary Examiner—Brian Sircus

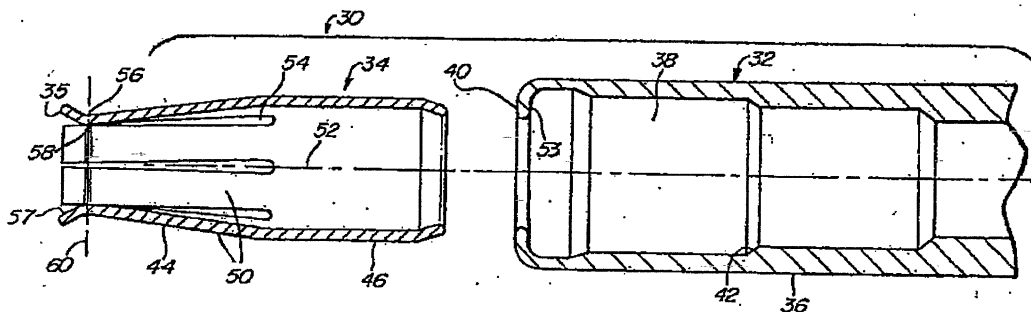
Assistant Examiner—Javaid Nasri

(74) *Attorney, Agent, or Firm*—Harold L. Jackson

(57) **ABSTRACT**

A connector terminal is disclosed including a cylindrical socket body with a spring contact inserted therein. The spring contact has a distal portion that establishes a press fit with the socket body. The socket body may be crimped over the distal portion to more securely hold the spring contact in the socket body. The spring contact further has a plurality of fingers which taper forwardly and inwardly to resiliently grab a male pin as it enters the socket.

20 Claims, 5 Drawing Sheets

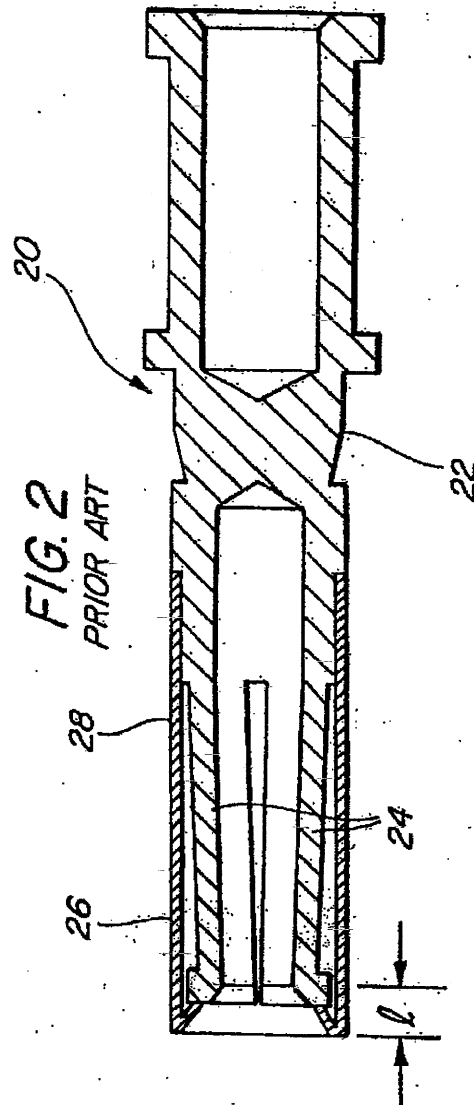
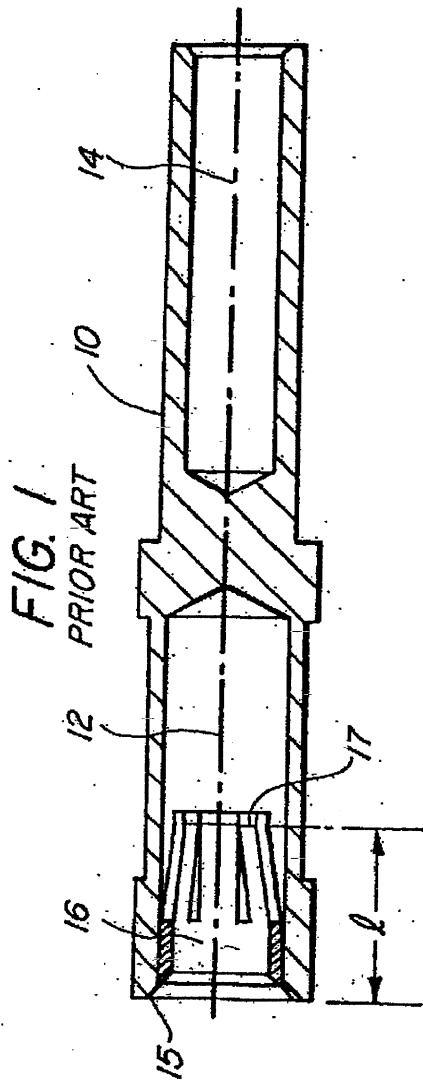


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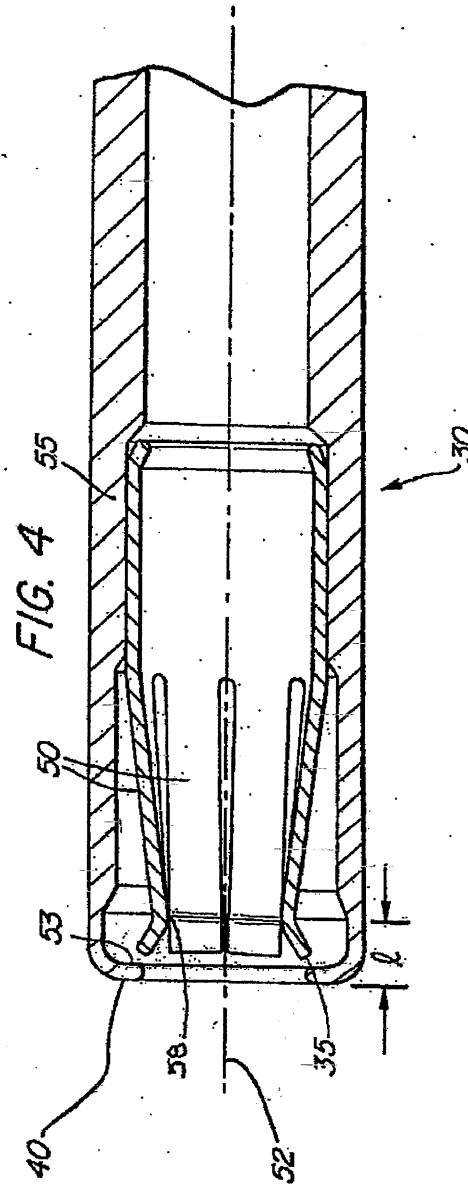
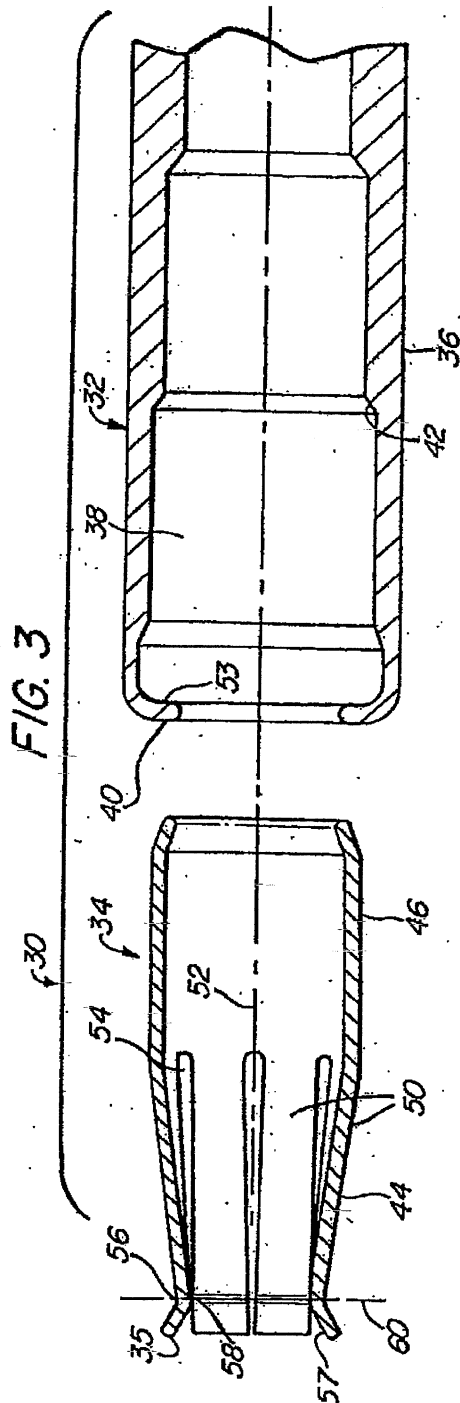


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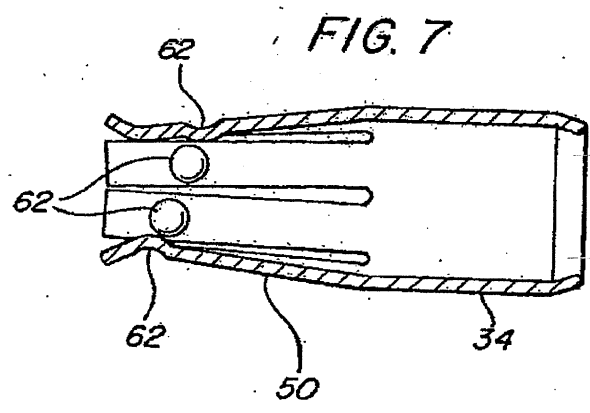
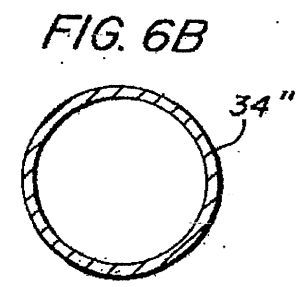
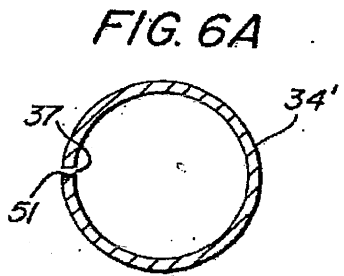
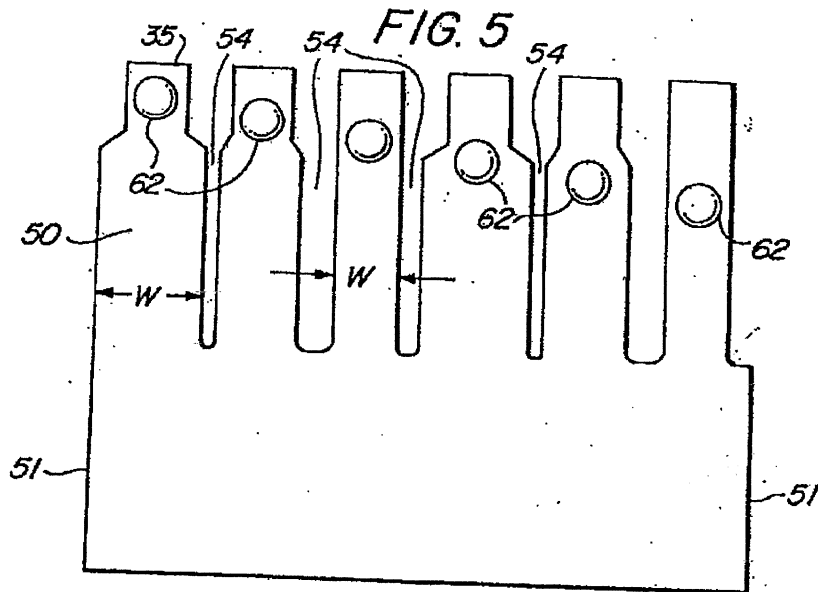


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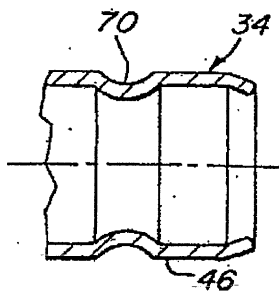


FIG. 8A

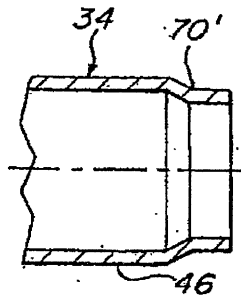


FIG. 8B

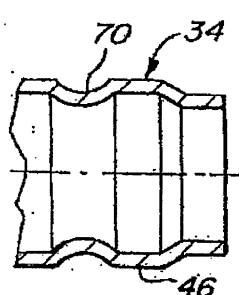


FIG. 8C

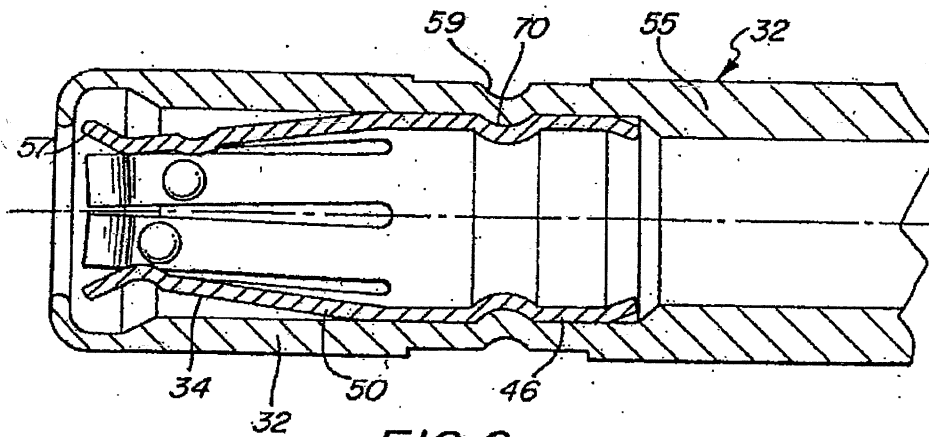


FIG. 9

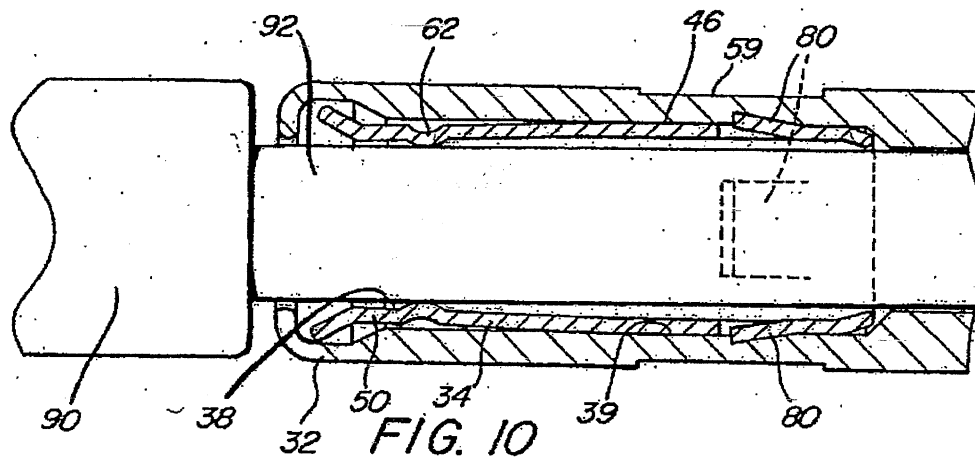


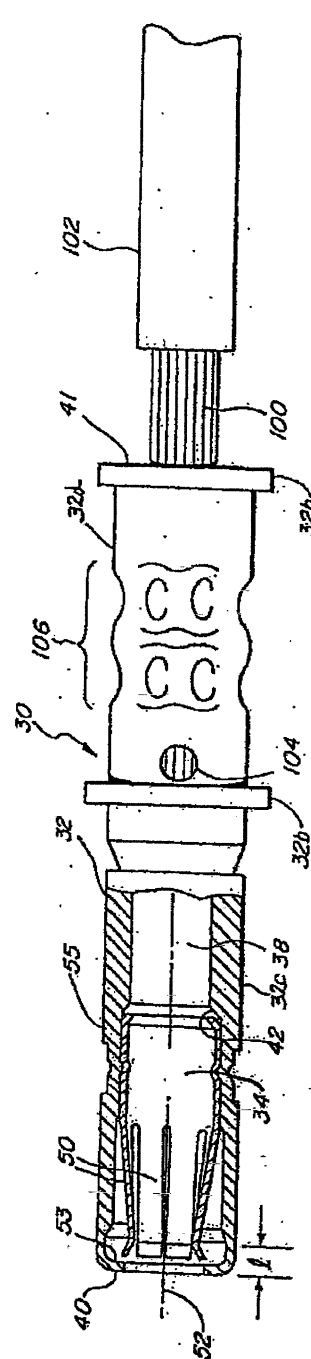
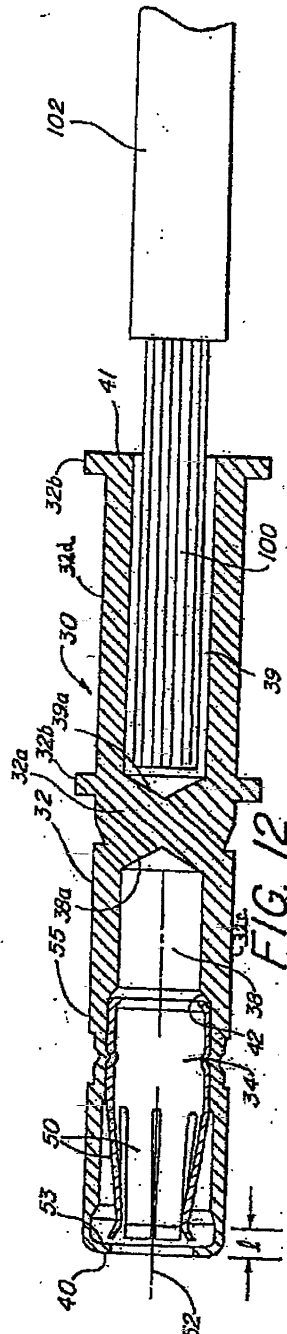
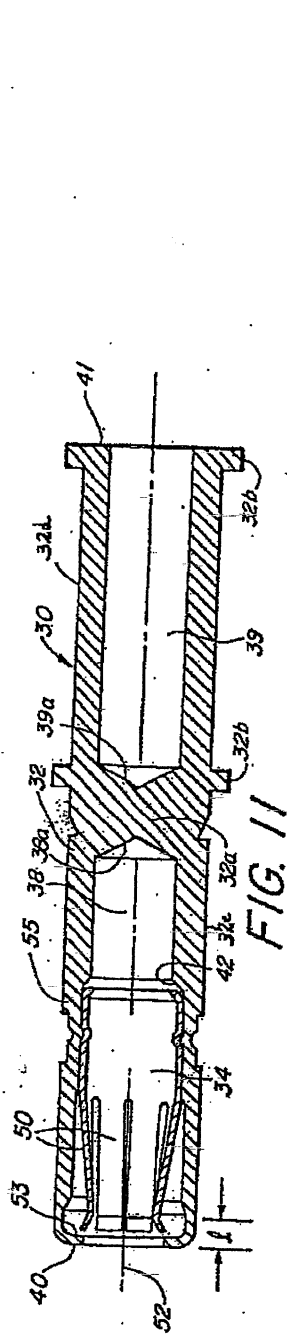
FIG. 10

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HOODLESS ELECTRICAL SOCKET CONTACT

RELATED APPLICATION

This application is a continuation-in-part of my application Ser. No. 09/104,733 filed Jun. 25, 1998 entitled Hoodless Electrical Socket Connector which was abandoned on Feb. 4, 2000.

FIELD OF THE INVENTION

This invention relates generally to electrical contacts, and more particularly, it is directed to a hoodless socket contact and method for making the same.

BACKGROUND OF THE INVENTION

Electrical contacts are present in all avionics, military and aerospace equipment environment such as in helicopters, missiles and planes. Such equipment may have dozens or even hundreds or even thousands of electrical connections that must be made between electronic power supplies, sensors, activators, circuit boards, bus wiring, wiring harnesses, to provide the electrical pathways or highways needed to transport electricity in the form of control signals and power. The hardware reliability requirements for operating in an avionics environment are stringent as a failure can have catastrophic consequences. As such, the electrical components and circuitry, as well as the connectors and contacts therein employed to electrically connect these items, must work in a wide range and wide variety of environmental conditions such as mechanical, vibration, wide temperature ranges, humidity and corrosive elements, etc. For example, military standards (also known in the industry as mil specs) for aircraft avionics equipment require that contacts be able to mate and unmate a minimum of five hundred times without a failure during all anticipated environmental and mechanical conditions. In addition, the contact assemblies must be protected to withstand repeated handling without significant distortion or damage to the interconnecting parts which could lead to a lack of electrical continuity.

One example of a high-amperage power socket contact or terminal is illustrated in U.S. Pat. No. 5,376,012 "Power Port Terminal" to Clark which includes a contact socket receiving portion and an integral mounting portion. The socket includes a web with a plurality of beams thereon. Each of the beams has a curved surface with a bend, which beams cooperate to form an axially extending tubular socket region which accepts a pin terminal of any desired length. Disadvantageously, the beams are exposed and therefore subject to damage. Additionally, the beams of the socket contact are not protected from entry of an oversize male contact, which may bend the beams beyond their elastic limit thereby damage the connector so that it will not perform electrically.

Another example of a socket contact is illustrated in U.S. Pat. No. 4,906,212 entitled "Electrical Pin and Socket Connector" to Mixon, Jr. which includes a socket having a cylindrical mating portion defined by cantilever beams having one or more blades wherein one or more of the blades include a rearwardly extending free end. The pin includes a mating portion having a bullet nose at one end and a wire barrel at another end. This connector suffers from the same limitations as the Clark connector and therefore is an undesirable alternative in environments where high reliability is critical.

A prior art female contact which is used in non-critical and in non-aerospace applications is shown in FIG. 1 which contact includes a cylindrical member 10 having holes 12 and 14 in the ends thereof. A spring member 16 is inserted in one of the ends, the spring member tapering rearwardly into the hole 12. Accordingly, a male pin contact inserted into the cylindrical member 10 would be grasped by the spring member 16 relatively deeply within the hole 12 which is disadvantageous. The distance from the free end 15 of the socket to the point of engagement 17 with a male contact or pin is designated by the letter "P" in FIG. 1 (and in FIG. 2). The particular connector halves in which the male and female contacts are used (and the positioning of the connector halves on the equipment, e.g., trays and black boxes) may result in a lesser or greater penetration of the male pins into the socket body. Furthermore, there is no mechanical structure to ensure that the spring member 16 will remain in place, and as such the spring may "walk out" of the hole during vibration or during mating and unmating cycles. Mil specs require that a spring member which provides the electrical continuity must be able to withstand the separation force during the unmating cycle (i.e., 500) without being dislodged under all anticipated environmental conditions including vibration. The arrangement of the spring 16 socket member 10 could be potentially hazardous if used in avionics environments where high reliability is a must for human safety.

Another example of a socket contact that is successfully manufactured and sold by the assignee of the present invention is shown in FIG. 2. This contact 20, sometimes referred to as a hooded socket contact, includes a tubular socket body 22 having a plurality of times 24 for receiving a male contact or pin. A hood 26 is inserted over the times 24 and rear portion of a contact to protect the times from damage. The hood is generally made of stainless steel with a wall thickness of only 0.004 to 0.010" for economic and reliability reasons. The hood is press fit over the cylindrical shoulder portion 28 at the rear of the contact. This press fit arrangement, due to the hood's wall thickness, requires precision manufacturing. Improper sizing of the socket body shoulder may result in damage to the hood during the press fit operation or the hood may come loose during use. Plating of the contact may exacerbate the press fit step during manufacturing. Furthermore, a stainless steel hood may not be tolerated in certain applications where interference with magnetic fields is a problem. In summary, the manufacturing steps necessary to insure reliable performance of the hooded type contact shown in FIG. 2 may result in a fairly expensive contact when mass produced.

Accordingly, there is a need for an improved socket contact that is simple to manufacture yet reliable in performance and that can be made in mass quantities at relatively low cost.

SUMMARY OF THE INVENTION

The foregoing mentioned disadvantages are avoided by providing a hoodless socket or female contact for engaging a male pin contact. The female contact includes a socket body with two ends, each end having an axially oriented hole or bore. A spring for making an electrical connection with a male contact or pin is located in one of the holes. The spring is arranged for resiliently engaging the male pin contact in close proximity to the hole entry point or free end of the socket body. Means are provided for securely holding the spring in the hole, which may be established by a press fit of the spring within the hole coupled with an extension of the socket body overlaying a portion of the spring thereby preventing the spring from exiting from the socket body.

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Alternatively, the spring may be securely coupled in the socket body by crimping the socket body onto the spring. Preferably, this is achieved by crimping a portion of the socket body into a peripheral annular groove in the spring. Barbs on the spring, which engage the inner wall of the hole of the socket body, may also be employed, with or without crimping, to provide additional security.

The hole at the other end of the socket body is sized and shaped to receive a conductor such as a insulated copper wire. The conductor may be electrically and mechanically secured together with the socket body by crimping the socket body onto the conductor.

The construction and operation of preferred embodiments of the contact of the present invention may best be understood by reference to the following description taken in conjunction with the accompanying drawings in which like components or features are designated by the same or primed reference numbers.

BRIEF DESCRIPTION OF THE DRAWINGS

FIG. 1 is a side cross-sectional view of a prior art contact;

FIG. 2 is a side cross-sectional view of another prior art contact;

FIG. 3 is a side cross-sectional, partially broken away side view of a socket contact in accordance with the principles of the invention illustrating the two parts of the socket contact prior to assembly;

FIG. 4 is a side cross-sectional, partially broken away side view of the contact parts of FIG. 3 assembled together;

FIG. 5 is a side view of a stamped out spring prior to roll forming;

FIGS. 6A and B are cross-sectional views illustrating a spring made from roll forming ("seam type") or deep drawn ("seamless type") processes, respectively;

FIG. 7 is a side cross-sectional view of the spring with dimples;

FIGS. 8A-C are partial side cross-sectional views of the back end of the spring with optional groove configurations therein;

FIG. 9 is a cross-sectional side view of an assembled socket contact that has been crimped;

FIG. 10 is a cross-sectional view of another assembled socket contact wherein the two parts are assembled together and in addition are also retained by barbs and a pin terminal is inserted into the socket contact;

FIG. 11 is a cross-sectional side view illustrating the two parts of the socket contact prior to assembly with an electrical conductor;

FIG. 12 is a cross-sectional side view of the socket contact with metal stands of an insulated conductor wire inserted into the rear portion of the socket body prior to crimping, and

FIG. 13 is a partially broken away side view of the socket contact with the rear portion of the socket body crimped onto the wire strands.

DESCRIPTION OF THE PREFERRED EMBODIMENT

Referring now to the drawings and more particularly to FIGS. 3 and 4, there is shown a socket contact generally indicated by reference number 30. The socket contact, sometimes hereinafter referred to as a hoodless socket, is made from two parts including a socket body 32 and a spring 34. The socket body 32 consists of a cylindrically or

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tubularly shaped member 36 having two ends, with an axially disposed male-contact-receiving hole or bore 38 extending from one of the ends 40 (i.e., free end) into the socket body a preselected distance and a conductor or wire receiving hole of bore 39 at the other end 41 thereof. See FIG. 11. The socket body 32 may be made of an electrically conductive material such as a brass/copper alloy. The male-contact-receiving hole 38 may have an inwardly projecting shoulder 42 that provides a back stop for the seating of the spring 34.

The spring 34 contains a forward male contact receiving portion 44 and a rear mounting portion 46. The contact receiving portion 44 includes a plurality of fingers or tines 50. The fingers are arranged around the longitudinal axis 52 of the spring 34 and are separated by gaps or slots 54 between adjacent fingers. Each of the forwardly extending fingers tapers inwardly to define together a tubularly shaped contact region 56 and 58 which engages a male pin inserted 3 therebetween and to provide a reliable electrical connection therebetween under anticipated adverse conditions. The portion of the fingers forward of the contact region 56 bend outwardly to form a flared region 57 which acts as a centralizer for guiding the insertion of a male pin. The tubularly shaped contact region 56 at the bends define a plane curved contact surface which surface may be in radial plane such as the an annular contact surface 58 at a preselected point 60 along a longitudinal axis 52. The preselected point for annular contact surface 58 of the spring 34 is spaced within about 0.020 to 0.045 inches, and preferably about 0.035 inches maximum, from the free end 40 of the socket body when the spring contact is secured therewith, i.e., equals about 0.020" to 0.045" and preferably about 0.035" maximum. The distance from the free end 40 of the socket body to the annular contact surface 58 is designated by the letter "X" in FIG. 4. The aforesaid arrangement between the socket body and spring thus allows electrical contact to be made with a male contact close to the end 40 of the socket body. This advantageously provides electrical contact to be made immediately essentially upon coupling a male contact (not shown) to the hoodless female contact 30, as required by the applicable mil specs.

The spring 34 may be of the seam type in which case it is made in a flat configuration, as illustrated in FIG. 5, and then roll formed into the form of a sleeve. A small gap 37 is formed between the edges 51, as shown in FIG. 6A. This gap may visually disappear as a result of the roll formation and press fit steps. Alternatively, the spring 34 may be of the seamless type made, for example, by deep drawing process well known in the art, as shown in FIG. 6B.

While the fingers 50 described hereinabove provide good electrical continuity to a male terminal, increased electrical contact may be established by providing the contact region 56 with inwardly disposed dimples 62, as shown in FIG. 7. While the dimples could be disposed on the same radial plane, preferably the dimples 62 are staggered on the fingers 50, i.e., disposed at different axial distances from the free end of the socket body as shown more particularly in FIG. 5. This advantageously reduces the insertion force needed to insert a male pin between the fingers 50 than when the dimples 62 are all on the same radial plane, while increasing the retention force provided by the fingers 50. Additionally, by staggering the dimples 62, the resonance point of the individual fingers 50 will vary during vibration, thus mitigating open circuit faults. Fingers having different widths "W", as illustrated in FIG. 5, also aid in overcoming the resonance problem encountered with conventional spring contacts. The dimples 62 further assure that a gas-tight

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connection is established between the fingers and a male contact. Such a gas-tight connection seals out corrosive gases and thereby prevents formation of films or corrosives on the surfaces interconnecting the mating male/female contacts that could degrade the electrical conductivity therebetween and cause failures in the connection. It should be noted that dimples or fingers having differing widths may not be necessary in many applications.

The spring 34 may be retained within the hole 38 of the socket body 32 by inserting the contact into the socket body with a press fit configuration and thereafter rolling the free end of the socket body radially inwardly to form an annular shoulder 53 which will engage end 35 of the spring in the event that a sufficient force is applied to the spring tending to pull the spring out of the socket body. See FIG. 4. Alternatively, or in addition thereto, the rear mounting portion 46 of the spring contact may have an annular groove 70 therein, shown with more particularity in FIG. 8A. After assembly, the wall of the socket body 32 may be roll crimped such that a portion 59 of the socket body wall is rolled into the groove 70, as shown in FIG. 9. The rear mounting portion 46 of the spring 34 may have a variety of groove configurations, as shown with more particularity in FIGS. 8A-C.

Another means for retaining the spring in the socket body is shown in FIG. 10. In this embodiment, the rear mounting portion 46 of the spring has a plurality of outwardly extending spring retention bars 80. The bars 80 resiliently compress inward upon insertion of the spring 34 into the hole 38, but dig into the inner wall 38 of the hole to resist removal. As further illustrated in FIG. 10, the pin portion 92 of a male contact 90 is inserted between fingers 50 which spread to resiliently grasp the pin portion 92 via the dimples 62. It should be noted that the dimples 62 are optional.

FIGS. 11-13 illustrate an attachment mechanism for electrically connecting the socket body 32 to an electrical conductor 102, such as a conventional insulated copper wire, for example. The socket body 32 includes a forward (first) tubular portion 32c and a rearward (second) tubular portion 32d separated by a solid center section 32a. The second or rearward portion 32c forms a wire receiving end 41 which opens to a rear hole or blind bore 39 which receives the copper strands 100 of insulated wire 102. The first or forward tubular portion 32c includes the male contact receiving blind bore 38 discussed previously. The front and rear bores 38 and 39 are closed by end walls 38a and 39a, respectively, formed by center section 32a of the socket body. The socket body 32 includes a pair of spaced radially extending shoulders 32b.

As is shown in FIG. 12, the wire strands 100 of the conductor 100 are inserted a predetermined distance into hole 39, which insertion may be aided by a small viewing hole 104 (shown in FIG. 13). The distal end wall 39a of the hole 39, in any event, limits the insertion distance of the wire. A selected portion 106 of the socket body 32, extending over the wire strands 100, is crimped onto the wire strands to make good electrical contact therewith and mechanically hold the wire strands 100 in the socket body 32, as shown in FIG. 13. Advantageously, the socket body while serving to hold and protect the spring also provides for direct attachment to conductor wires and the like without the need for additional parts. It should be noted that while it is preferable to provide separate front (first) and rear (second) holes, 38 and 39, respectively, separated by a center section 32a of the socket body, the hole or bore could be continuous, i.e., one long bore.

There has thus been described an improved contact arrangement which can be cost effectively manufactured on a

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repetitive basis. This spring is protected from damage by the socket body. The dimples, when utilized, provide an increased gas tight point(s) of contact, allowing thinner or less noble electrical conductive plating to be used on the fingers. Optionally, staggering the dimples reduces the overall mating and unmating force while maintaining a desired gas tight seal between the fingers and the male contact. Accordingly, various modifications of the hoodless socket, and processes involved in manufacturing the contact terminal, will occur to persons skilled in the art without involving any departure from the spirit and scope of the invention as set forth in the appended claims.

What is claimed is:

1. A two piece hoodless female contact for engaging a male pin comprising:

a socket body forming one piece of the contact, the socket body having a first tubular portion and a second portion extending along a longitudinal axis, the first portion having an axial hole therein defining an open free male contact receiving end, the second portion having an open wire-receiving end for connection with an electrical conductor; and

a separate spring forming another piece of the contact, the spring being located in the axial hole defining the male contact receiving end of the first tubular portion, the spring including a forward portion and rear portion, the forward portion having a plurality of forwardly and inwardly extending fingers which terminate near the free male contact receiving end of the first tubular portion for resiliently grasping a male pin in close proximity to the free male contact receiving end.

2. The contact defined in claim 1 wherein the socket body further includes a third portion in the form of a solid generally cylindrical section disposed between the first and second portions and wherein each of the fingers includes a male pin engaging surface and wherein the male pin engaging surfaces of the fingers are arranged to grasp the male pin at a distance along the longitudinal axis within a range of about 0.025 to 0.045 inches from the free male contact receiving end of the socket body.

3. The contact defined in claim 2 wherein each of the fingers flare outwardly and forwardly of the respective pin engaging surface thereof for facilitating insertion of the male pin in between the fingers.

4. The contact defined in claim 1 wherein each of the fingers has an inwardly disposed dimple which forms the pin engaging surface for engaging the male pin.

5. The contact defined in claim 4 wherein the dimples are staggered along the lengths of the individual fingers with the dimples being positioned at different axial distances from the free male contact receiving end of the first tubular portion of the socket body.

6. The contact defined in claim 1 wherein the first tubular portion of the socket body is crimped onto the rear portion of the spring.

7. The contact defined in claim 1 wherein the forward portion of the spring terminates axially inwardly of the free male contact receiving end of the first tubular portion of the socket body and wherein the free end of the first tubular portion of the socket body is rolled over to extend radially inwardly beyond the forward portion of the spring to prevent removal of the spring from the hole and to center a mating pin contact.

8. A two piece female contact comprising:

a cylindrically shaped socket body member formed as a single part comprising one piece of the contact, the socket body member having first and second tubular

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portions separated by a solid center portion extending along a longitudinal axis, the first tubular portion defining a first axially disposed blind bore with a free end for receiving a male contact, the second tubular portion defining a second axially disposed blind bore sized and shaped to receive an electrical conductor; and

a separate male contact engaging spring forming another piece of the female contact, the spring being seated entirely in the first bore, the spring having front and rear portions, the front portion of the spring having a female coupling portion adjacent to the free end of the first tubular portion of the socket body member and the rear portion of the spring and the first tubular portion of the body member having cooperative securing means for securely holding the spring in fixed position within the body member.

9. The contact defined in claim 8 wherein the first tubular portion of the socket body member defines a tubular wall and wherein the cooperative securing means comprises a selected portion of the tubular wall being roll formed into the rear portion of the spring.

10. The contact defined in claim 8 wherein the first blind bore has an inwardly projecting shoulder, the rear portion of the spring seating against the shoulder to inhibit rearward movement of the spring within the first blind bore of the body.

11. The contact defined in claim 8 further comprising a male pin adapted to be inserted into the front female coupling portion of the spring; the female coupling portion having a plurality of forwardly projecting fingers which are arranged to engage the male pin inserted therebetween in close proximity to the free end of the first blind bore.

12. The contact defined in claim 11 wherein the fingers have male pin engaging surfaces which are arranged to engage the male pin at a distance of within the range of about 0.025 to 0.45 inches from the free end of the first blind bore.

13. A male/female contact system for coupling a male pin contact to a female socket contact, comprising:

a male pin contact;

a female socket contact formed in two separate pieces, the first piece being in the form of a tubular socket member having a first blind bore therein with an open free end and having a second blind bore therein sized and shaped for receiving an electrical conductor, the tubular socket member consisting of a single part; and

the second piece of the female socket contact being a spring member in the form of a sleeve seated in the first blind bore of the tubular socket member and establishing a press fit therein to prevent movement of the spring member relative to the tubular socket member, the spring member having a forwardly extending female coupling portion terminating adjacent the open free end of the first blind bore, said male pin contact being inserted into the open free end and grasped by the female coupling portion.

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14. The male/female contact system defined in claim 13 wherein the tight fit between the socket and spring member is established by burrs on one of the members which dig into the other member.

15. The contact defined in claim 13 wherein the spring member has an indentation and the tubular socket member has a cooperative indentation seated therewith for securely holding the two members together.

16. The contact defined in claim 13 wherein the female coupling portion grasps the male contact at a distance within the range of about 0.025 to 0.045 inches of the open free end of the first blind bore.

17. A method for making a two piece female socket contact comprising the steps of:

forming a sleeve spring member having a rear end and a female coupling portion at a forward end;

forming a separate one piece socket body having first and second tubular portions separated by a solid center section, each of the first and second portions having a wall surrounding a blind bore therein, the blind bore in the first tubular portion having a free open end for receiving the spring member and the blind bore in the second tubular portion adapted to receive a conductor; inserting the spring member entirely within the blind bore in the first tubular portion of the socket body to form a press fit with the female coupling portion being positioned adjacent to the free open end of the blind bore in the first tubular portion;

providing an electrical conductor; and

inserting the electrical conductor into the blind bore in the second tubular portion and crimping the wall of the second tubular portion onto the electrical conductor.

18. The method of claim 17 further comprising the step of: providing a male contact; and

inserting the male contact into the spring contact female coupling portion establishing an electrical coupling therebetween.

19. The method of claim 17 wherein the female coupling portion of the spring member is formed with a plurality of resilient fingers which are spread apart upon the insertion of a male contact.

20. The method of claim 19 wherein the plurality of resilient fingers of the spring member have a proximal end positioned adjacent the free open end of the blind bore in the first tubular portion of the socket body and further including the step of rolling the wall of the first tubular portion of the socket body adjacent the free open end of the blind bore in the first tubular portion to form an inwardly projecting shoulder which limits the outward movement of the spring member and inhibits damage to the spring member by an oversize mating male pin.

* * * * *

UNITED STATES PATENT AND TRADEMARK OFFICE
CERTIFICATE OF CORRECTION

PATENT NO. : 6,250,974 B1
DATED : June 26, 2001
INVENTOR(S) : Kerek

Page 1 of 1

It is certified that error appears in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

Column 2,

Line 11, "1" should read -- "f" --.

Column 4,

Line 19, delete "3".

Line 26, delete "an".

Line 35, " ", should read -- "f" --.

Column 6,

Line 18, "alone" should read -- along --.

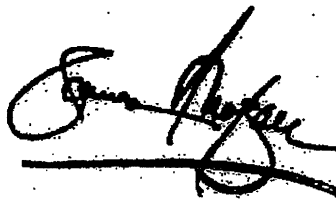
Line 29, delete "free".

Line 31, delete "free".

Signed and Sealed this

Twenty-sixth Day of March, 2002

Attest:



Attesting Officer

JAMES E. ROGAN
Director of the United States Patent and Trademark Office

EXHIBIT # D

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June 27, 2008

By Registered Mail/Return Receipt Requested

Pierre Lehmann, Chief Executive Officer
Preci-Dip Durtal SA
Rue Saint-Maurice 34
P.O. Box 834
CH-2800
Delemont, Switzerland

Re: Tri-Star Electronics International v. Preci-Dip Durtal SA
United States District Court No. CV08-04226
Complaint for Patent Infringement

Dear Mr. Lehmann:

Enclosed please find the Complaint for Patent Infringement and related documents filed by Tri-Star Electronics International against Preci-Dip Durtal SA in the United States District Court for the Central District of California on June 26, 2008.

Pursuant to the Hague Service Convention, Article 5, we are requesting that you voluntarily accept service of the enclosed documents by signing and returning the enclosed Acknowledgment of Service. If we do not receive the signed Acknowledgment of Service within 14 days of your receipt of this letter, we will assume that you have chosen not to voluntarily accept service and we will take measures to effectuate service through other means. If you do not voluntarily accept service, we may be entitled to our costs and expenses in serving you through other means.

70337162.1

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Pierre Lehmann
June 27, 2008
Page 2

Thank you for your attention to this matter. Please let us know if you have any questions.

Very truly yours,

A handwritten signature in black ink, appearing to read 'Spencer Persson', with a long horizontal line extending to the right.

Spencer Persson

SP/kb
Enclosures

cc: Gregory B. Wood
Todd M. Sorrell
(without enclosures)

ATLANTIC RICHFIELD PLAZA
LOS ANGELES, California
900719997
0545300030 -0093
06/27/2008 (800)275-8777 01:44:41 PM

Product Description	Sale Qty	Unit Price	Final Price
Switzerland - First-Class Mail Int'l Large Env. 5.70 oz.			\$5.20
Return Receipt Registered			\$2.20
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Article Value :		\$0.00	
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Subtotal:			\$0.00
Issue PVI:			\$0.00
Total:			\$0.00

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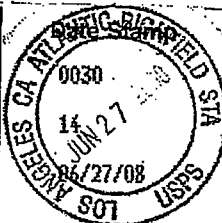
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YOUR OPINION COUNTS

Customer Copy

Registered No. RA584520063US			
Reg. Fee \$10.80		Return Receipt \$2.20	
Handling Charge \$5.20		Restricted Delivery \$0.00	
Postage \$5.20		Received by <i>R. Leguere</i>	
Customer Must Declare Full Value \$		<input type="checkbox"/> With Postal Insurance <input checked="" type="checkbox"/> Without Postal Insurance	
OFFICIAL USE			
To Be Completed By Customer (Please Print)		To Be Completed By Post Office	
FROM		TO	
Spencer Persson		555 S. Flower St., 41st Floor	
Fulbright + Jaworski L.L.P.		Los Angeles, CA 90071	
555 S. Flower St., 41st Floor		Pierre Lehmann Preci-Dip Durta	
Los Angeles, CA 90071		CH Switzerland Rue Saint-Maurice 34	
Pierre Lehmann Preci-Dip Durta		P.O. Box 834	
CH Switzerland Rue Saint-Maurice 34		CH-2800 Delémont, Switzerland	
P.O. Box 834			
CH-2800 Delémont, Switzerland			

PS Form 3806, Receipt for Registered Mail Copy 1 - Customer
May 2004 (7530-02-000-9051) (See Information on Reverse)
For domestic delivery information, visit our website at www.usps.com

EXHIBIT # E

Jri-Star

Completed by the office of origin. (A remplir par le bureau d'origine.)	Registered Article (<i>Envoi recommandé</i>)			
	<input type="checkbox"/> Letter (<i>Lettre</i>)	<input type="checkbox"/> Printed Matter (<i>Imprimé</i>)	<input type="checkbox"/> Other (<i>Autre</i>)	<input type="checkbox"/> Recorded Delivery (<i>Envoi à livraison attestée</i>)
	<input type="checkbox"/> Insured Parcel (<i>Colis avec valeur déclarée</i>)	Insured Value (<i>Valeur déclarée</i>)		<input type="checkbox"/> Express Mail International
	Article Number			
	Office of Mailing (<i>Bureau de dépôt</i>)		Date of Posting (<i>Date de dépôt</i>)	
	Addressee Name or Firm (<i>Nom ou raison sociale du destinataire</i>)			
	Pierre Lehmann Preci-Dip Durtal SA			
	Street and No. (<i>Rue et No.</i>)			
	Rue Saint-Maurice 34, P.O. Box 834			
	Place and Country (<i>Localité et pays</i>)			
	CH-2800 Delemont, SWITZERLAND			
Completed at destination. (A compléter à destination.)	This receipt must be signed by: (1) the addressee; or, (2) a person authorized to sign under the regulations of the country of destination; or, (3) if those regulations so provide, by the employee of the office of destination. This signed form will be returned to the sender by the first mail. (Cet avis doit être signé par le destinataire ou par une personne y autorisée en vertu des règlements du pays de destination, ou, si ces règlements le comportent, par l'agent du bureau de destination, et renvoyé par le premier courrier directement à l'expéditeur.)			
	<input checked="" type="checkbox"/> The article mentioned above was duly delivered. (L'envoi mentionné ci-dessus a été dûment livré.)		Date	
	Signature of Addressee (<i>Signature du destinataire</i>)		Office of Destination Employee Signature (<i>Signature de l'agent du bureau de destination</i>)	

PS Form 2865, October 1992 (Reverse)

EXHIBIT # F



TRI-STAR
Electronics International, Inc.

2201 Rosecrans Avenue
El Segundo, CA 90245 U.S.A.
Tel: (310) 536-0444
Fax: (310) 536-9322
www.tri-starelectronics.com

January 20, 2006

Pierre Lehmann, CEO
Preci-Dip Durtal SA
Rue St-Maurice 34
P.O.Box 341
CH-2800 Delemont, Switzerland

Subject: Inquiry into Patented Clip Design

Dear, Mr Lehmann

Tri-Star Electronics has recently become aware of Preci-Dip's Mil-Spec contact with "reversed clip technology" Your published literature states:

"Reversed-clip contacts are presently available in size 12, 16, 20 and 22. this proprietary technology, entirely developed by PRECI-DIP, is protected by international patents."

Tri-Star Electronics has reviewed a number of your patent filings and believe we have reviewed all that relate to this claim. Tri-Star Electronics has also filed a patent, prior to your reference patent filing, that clearly calls out that our clip is outwardly and forwardly facing. Our patents are enforceable in the United States and Europe.

Does Preci-Dip plan to offer for sales these contacts in either the United States or Europe? If so, we believe Preci-Dip may be in violation of Tri-Star's reverse clip contact design. To avoid any future questions or disputes regarding the Preci-Dip claim, I request that you forward your patent and product samples for our office to review.

Best Regards,


Felix Acosta

Director of Engineering
Tri-Star Electronics Int'l, Inc.

CC: David Bouzek, VP & General Manager
Harold Jackson, Patent Attorney



EXHIBIT # G

PRECIP-DIP DURTA SA
CONNECTION TECHNOLOGY

Rue St Maurice 34, PO box 341
CH-2800 Delémont, Switzerland
Phone: +41 (0)32 421 04 00
Fax: +41 (0)32 421 04 01

Tri-Star Electronics Int'l, Inc.
Mr. Felix Acosta
Director of Engineering
2201 Rosecrans Avenue

El Segundo, CA 90245 U.S.A.

Delémont, le 8 février 2006

Subject: Patented clip design

Dear Mr. Acosta,

I received your letter of January 25, 2006, but need more information from you in order to properly investigate this matter. I will need a list of all US and foreign patents that Tri-Star owns that it believes covers any product of ours. I will also need you to identify which products you currently sell that are protected by these patents. Once I have this information, I can investigate this matter and respond to you.

Very truly yours,

PRECIP-DIP DURTA SA
Pierre Lehmann, CEO

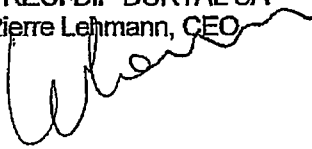


EXHIBIT # H



TRI-STAR
Electronics International, Inc.

2201 Rosecrans Avenue
El Segundo, CA 90245 U.S.A.
Tel: (310) 536-0444
Fax: (310) 536-9322
www.tri-starelectronics.com

February 15, 2006

Pierre Lehmann, CEO
Preci-Dip Durtal SA
Rue St-Maurice 34
P.O. Box 341
CH-2800 Delemont, Switzerland

Subject: Inquiry into Patented Clip Design

Dear Mr. Lehmann,

Thank you for responding to my letter of January 25, 2006. This is to inform you that Tri-Star Electronics was granted patent in the United States in June 26, 2001 under patent number US 6,250,974 B1. Australia under patent No. 757608.

The EPC application (designating Belgium, Switzerland/Liechtenstein, Germany, Denmark, Spain, France, UK, Italy, Netherlands and Sweden) has been approved and allowed, awaiting patent number release.

Tri-Star Electronics patent covers all socket sizes variations.

My best regards,


Felix Acosta

Director of Engineering
Tri-Star Electronics International, Inc.

Cc: Dave Bouzek, VP & General Manager
Harold Jackson, Patent Attorney



EXHIBIT # I



TRI-STAR
Electronics International, Inc.

2201 Rosecrans Avenue
El Segundo, CA 90245 U.S.A.
Tel: (310) 536-0444
Fax: (310) 536-9322
www.tri-starelectronics.com

April 12, 2006

Pierre Lehmann, CEO
Preci-Dip Durtal SA
Rue St-Maurice 34
P.O. Box 341
CH-2800 Delemont, Switzerland

Subject: Inquiry into Patented Clip Design

Dear Mr. Lehmann,

Nearly two months have past since we provided our patent information to you. We are most anxious to hear back from you so that we can prevent or preclude possible future patent disputes or challenges.

Please let me know if I can be of any further help.

My best regards,


Felix Acosta

Director of Engineering
Tri-Star Electronics International, Inc.

Cc: Dave Bouzek, VP & General Manager
Harold Jackson, Patent Attorney



EXHIBIT # J



PRECIP-DIP DURTAL SA
Rue St Maurice 34, PO box 341
CH-2800 Delémont, Switzerland
Phone: +41 (0)32 421 04 00
Fax: +41 (0)32 421 04 01

Tri-Star Electronics Int'l, Inc.
Mr. Felix Acosta
Director of Engineering
2201 Rosecrans Avenue

El Segundo, CA 90245 U.S.A.

Delémont, le 26 avril 2006

CONFIDENTIAL - FOR SETTLEMENT PURPOSES ONLY

Subject: Tri-Star's Patent Infringement Allegations

Dear Mr. Acosta,

Thank you for your April 12 letter.

We have now had an opportunity to investigate, with assistance of patent counsel, and to consider Tri-Star's patent infringement allegations. In particular, we have carefully reviewed the U.S. and Australian patents and their files and the European patent application identified in your February 16 letter, in view of Preci-Dip's products. We have concluded that Preci-Dip's products do not infringe any valid, enforceable claim of Tri-Star's patents and application for a "Hoodless Electrical Socket Contact" because among other reasons, our product has three pieces, including a stainless steel hood.

We trust that our comments conclude this matter, and we thank you for your amicable presentation of your concerns.

Best regards.

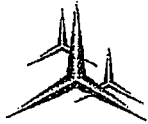
Very truly yours,

PRECIP-DIP DURTAL SA
Pierre Lehmann, CEO

A handwritten signature in black ink, appearing to be "P. Lehmann", written over the printed name of the CEO.

Cc: James A. Oliff, Patent Attorney

EXHIBIT # K



TRI-STAR
Electronics International, Inc.

2201 Rosecrans Avenue
El Segundo, CA 90245 U.S.A.
Tel: 310.536.0444
Fax: 310.536.9322
www.tri-starelectronics.com

November 14, 2007

Mr. Pierre Lehmann, CEO
Preci-Dip Durtal SA
Rue St-Maurice 34, PO Box 341
CH-2800 Delemont, Switzerland

Ref: Preci-Dip Durtal letter regarding Patent Issues

Dear Pierre Lehmann,

Felix Acosta and you have corresponded on our concerns regarding our patent on Mil-C-39029 socket contacts and product being sold by Preci-Dip. In your last letter you noted the title of our patent "Hoodless Electrical Socket Contact" and pointed out that your product has three piece construction.

The key and significant characteristics of our patent are of course located in the body of our patent filing and not in the patent title. We have carefully reviewed your actual product as well as your patent filing and the internal design elements definitely and unquestionably conflicts with our patent. For instance, your product having a hood or sleeve does not cancel out our patent on the outward facing internal clip. There is also no question that our patent was indeed filed before your patent filing.

Tri-Star has invested a great deal of time and effort into the development and implementation of this unique contact design. I am sure you can understand our intent to protect our investment and patent to the fullest extent allowed by U.S. and international patent laws.

The primary purpose of this letter is twofold. First, I want to advise you that your product most definitely violates our patent filings. Secondly, I also wanted to open a dialogue with Preci-Dip so that we could attempt to resolve this issue between our two companies without a lengthy conflict. I would be willing to open a discussion regarding licensing or royalty arrangements prior to other courses of actions. I visit Europe on a regular basis and would be happy to arrange a meeting with you to discuss potential resolutions.

We would like to hear back from Preci-Dip whether you plan to explore these arrangements with Tri-Star or not. My hope is for the two of us to reach a business resolution and move forward.

I will look forward to your response.

Best regards,

David J. Bouzek
VP & Business Unit Manager: Contacts

cc: John Carson, Fulbright & Jaworski, Intellectual Property Attorneys at Law

